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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,990	10/30/2003	Jason A. Demers	1062/D85	7851
2101 7590 07/03/2007 BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			EXAMINER WEINSTEIN, LEONARD J	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 07/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/696,990

Applicant(s)

DEMERS ET AL.

Examiner

Leonard J. Weinstein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment of April 18, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-4, 8, and 23-25 are rejected under 35 U.S.C 102(a) as being anticipated by Rosiello (USPN 7,011,743), published as patent publication US 2003/0052065 (March 20, 2003), as set forth in the rejection of claims 1-4, 8, and 23-25 in the office action of December 18, 2006.

4. Claims 9-11, 13, and 16-17 are rejected under 35 U.S.C 102(b) as being anticipated by Dennehey et al. (USPN 5,482,440) as set forth in the rejection of claims 9-11, 13, and 16-17 in the office action of December 18, 2006.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 9, 15-16 and 18-19 are rejected under 35 U.S.C 103(a) as being unpatenable over Rosiello in view of Dennehey as set forth in the rejection of claims 1, 9, 15-16 and 18-19 in the office action of December 12, 2006.

7. Claims 5, 12, and 20 are rejected under 35 U.S.C 103(a) as being unpatenable over Rosiello in view of Dennehey as applied to claims 1, 9, and 16 and further in view of Grimm et

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al. (USPN 6,245,570) as set forth in the rejection of claims 5, 12, and 20 in the office action of December 12, 2006.

8. Claims 6, 7, 14, and 21-22 are rejected under 35 U.S.C 103(a) as being unpatenable over Rosiello in view of Dennehey as applied to claims 1, 9, and 16 and further in view of Juji et al. (USPN 5,098,371) as set forth in the rejection of claims 6, 7, 14, and 21-22 in the office action of December 12, 2006.

Response to Arguments

9. Applicant's arguments filed April 18, 2007 have been fully considered but they are not persuasive.

10. With regards to the Rosiello reference the applicant argues that Rosiello the plurality of fluid management cassettes do not include pump chambers and do not pump fluids. The applicant argues that Rosiello's fluid management cassettes are not pump cassettes that are used respectively with a plurality of pumps. The applicant also argues that the rectangular box cited by the examiner with comment #5 in the figure of the Rosiello provided in the office action of December 18, 2006, which is an optical sensor, does not constitute a pump chamber.

a. In response to applicant's argument that Rosiello's fluid management cassettes do not pump fluids and are not used with a plurality of pumps, the examiner disagrees. In the embodiment shown in figure 1, Rosiello teaches a pump 12 that pumps air and a peristaltic pump thus constituting a plurality of pumps being used with a plurality of cassettes. Further in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a one to one relationship between a cassette and a pump) are not recited in the rejected claim(s). The limitations as claimed do not include the limitation

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of a plurality of pump cassettes, each being in fluid communication with a separate pump. Further the recitation of "a first pump chamber" does not limit the claimed invention to having a plurality of pumps each having a pump chamber being in fluid communication with a separate cassette; rather, as claimed, the broadest interpretation yields the limitation of a plurality of cassettes, all in communication with a single pump chamber. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

b. In response to applicant's argument that the rectangular box cited by the examiner with comment #5 in the figure of the Rosiello provided in the office action of December 18, 2006, which is an optical sensor, does not constitute a pump chamber, the examiner disagrees. Rosiello states in column 4 on line 4-6 that Barry et al. (USPN 6,175,420) is incorporated by reference in its entirety with respect to the fluid management system. The aspect of Barry that is of note is that of the optical sensor, shown in figure 5 of Barry, which Rosiello has incorporated into the fluid management cassettes as shown in figure 1. Barry teaches a single cassette in a fluid distribution system 40 (col. 9 ll. 6-11) provided with a single optical sensor 200 as shown in figure 7. A housing 208 as shown in figure 5 covers the optical sensor that is provided within a distribution system and surrounded by a manifold 256 constituting a pumping chamber. Rosiello teaches fluid management cassettes each having an optical sensor thus representing a plurality of optical sensors as taught by Barry, each being provided within a separate distribution system as Barry incorporated with Resiello. Therefore examiner's reference to the optical sensors in the office action of December 18, 2006, and in view

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of Barry, is representative of a pump chamber and not meant to be construed as a chamber in and of itself.

11. With regards to the Dennehey reference the applicant argues Dennehey's cassettes are not pump cassettes that include pump chambers. The applicant also argues that Dennehey does not teach or suggest that the blood cassettes have an inlet selectively coupled to a working solution pump chamber. The applicant also argues that elements F8 and F9 are only liquid paths and do not teach pump chambers. The applicant argues that Dennehey does not teach or suggest a working solution inlet tube that joins distribution tubing proximate to a junction between the distribution tubing and a middle one of the pump cassettes. The applicant also argues that Dennehey teaches an umbilicus, cited by the examiner to teach a working solution inlet tube, has a very distinct structure and cannot constitute the working solution inlet tube. The applicant also argues that the umbilicus includes distinct lumens corresponding to each of the tubes entering and exiting the umbilicus and at no point is the tubes a single working solution tube.

a. In response to applicant's argument that Dennehey's cassettes are not pump cassettes that include pump chambers the examiner disagrees. The elements F8 and F9 as cited by the examiner to teach working solution pump chambers meet the criteria as set forth by the applicant in the amendment of April 18, 2007 for a pump chamber. As can be seen in figure 6 of Dennehey, elements F8 and F9, are both defined by enclosed spaces, and are larger than the passages leading to and away from them. As can be seen the fluid pathways T8 and T9 leading into elements F8 and F9 respectively, have diameters smaller than those of the chambers they are connected to thus elements T8

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and T9 are enlarged sections of passages and constitute working solution pump chambers.

b. In response to applicant's argument that Dennehey does not teach or suggest a working solution inlet tube that joins distribution tubing proximate to a junction between the distribution tubing and a middle one of the pump cassettes, the examiner disagrees. The umbilicus 24 cited by the examiner does constitute a working solution inlet tube as it has a tubular structure and houses, via element 200, working solution-conveying tubing, elements 42 (to element 66 via 64 and cassette 22A), 44 (to element 76 and cassette 22B), and 46 (to element 86 and cassette 22C), and constituting distribution tubing, within the fluid as shown in figure 20 of the disclosure of Dennehey. The umbilicus 24 therefore joins distribution tubing proximate to a junction between the distribution tubing and a middle one of the cassettes. The cylindrical main body of umbilicus, element 200, constitutes a single tube joining, within a housing, distribution tubing. Further in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a single working solution tube wherein the working solution is taken from a common reservoir and taken to individual cassettes) are not recited in the rejected claim(s). The limitation of a working solution inlet tube that joins distribution tubing is not limited to a single tube where a plurality of tubes meet and share a reservoir and is anticipated by a single tube that houses several tubes carrying fluid to a plurality of cassettes. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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12. With regards to applicant's argument that a rejection of claims 1, 9, 15-16, and 18-19 under 35 U.S.C. 103(a) as being unpatentable over Rosiello in view of Dennehey cannot be made because neither Rosiello nor Dennehey teach or suggest all limitations of independent claims 1, 9 and 16, and the combination cannot make claim 1, 9, or 16 obvious, the examiner disagrees. As discussed above Rosiello and Dennehey teach all the limitations as claimed for claims 1 and 9 and therefore the rejection of dependent claims 15-16 and 18-19 under 35 U.S.C. 103(a) as being unpatentable over Rosiello in view of Dennehey is upheld.

13. With regards to applicant's argument that a rejection of claims 5, 12, and 20 under 35 U.S.C. 103(a) as being unpatentable over Rosiello and Dennehey as applied to claims 1, 9, and 16, and further in view of Grimm (USPN 6,245,570) cannot be made because the references fail to teach the inlet port and pump chamber as required by claims 1, 9, and 16, the examiner disagrees. As discussed above Rosiello and Dennehey teach all the limitations as claimed for claims 1, 9, and 16 therefore the rejection of dependent claims 5, 12, 20, and 35 under 35 U.S.C. 103(a) as being unpatentable over Rosiello i.v. Dennehey, and further in view of Grimm is upheld.

14. With regards to applicant's argument that a rejection of claims 6, 7, 14, and 21-22 under 35 U.S.C. 103(a) as being unpatentable over Rosiello and Dennehey as applied to claims 1, 9, and 16, and further in view of Juji (USPN 5,098,371) cannot be made because the references fail to teach the inlet port and pump chamber as required by claims 1, 9, and 16, the examiner disagrees. As discussed above Rosiello and Dennehey teach all the limitations as claimed for claims 1, 9, and 16 therefore the rejection of dependent claims 6, 7, 14, and 21-22 under 35 U.S.C. 103(a) as being unpatentable over Rosiello i.v. Dennehey, and further in view of Juji is upheld.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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